



Appln. Ser. No. 09/850,324
Atty. Dkt. No. 044829-0127

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: McDonald, et al
Title: ANTIMICROBIAL POLYMER
Appl. No.: 09/850,324
Filing Date: 05/07/2001
Examiner: Ana Lucrecia Woodward
Art Unit: 1714

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SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT
UNDER 37 CFR §1.56

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Sir:

Submitted herewith on Form PTO/SB/08 is a listing of documents known to Applicants in order to comply with Applicants' duty of disclosure pursuant to 37 CFR §1.56. A copy of each listed document is being submitted to comply with the provisions of 37 CFR §1.97 and §1.98.

The submission of any document herewith, which is not a statutory bar, is not intended as an admission that such document constitutes prior art against the claims of the present application or that such document is considered material to patentability as defined in 37 CFR §1.56(b). Applicants do not waive any rights to take any action which would be appropriate to antedate or otherwise remove as a competent reference any document which is determined to be a *prima facie* art reference against the claims of the present application.

TIMING OF THE DISCLOSURE

The listed documents are being submitted in compliance with 37 CFR §1.97(b), before the mailing date of the first Office Action on the merits.

RELEVANCE OF EACH DOCUMENT

All of the documents are in English.

Applicants respectfully request that any listed document be considered by the Examiner and be made of record in the present application and that an initialed copy of Form PTO/SB/08 be returned in accordance with MPEP §609.

The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 CFR §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 06-1447. Should no proper payment be enclosed herewith, as by a check being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 06-1447.

Respectfully submitted,

Date

7/25/03

By

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JUL 25 2003
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Substitute for form 1449B/PTO		Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT Date Submitted: July 25, 2003 <i>(use as many sheets as necessary)</i>		Application Number	09/850,324
		Filing Date	05/07/2001
		First Name of Inventor	William F. McDonald
		Group Art Unit	1714
		Examiner Name	Ana Lucrecia Woodward
Sheet 1 of 4	Attorney Docket Number	044829-0127	

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U.S. PATENT DOCUMENTS						
Examiner Initials*	Cite No. ¹	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code ² (if known)			
		6,340,465	B1	HSU Li-Chien et al.	01-22-2002	
		6,319,674	B1	Fulcrand et al.	11-20-2001	
		6,232,434	B1	Stamler et al.	05-15-2001	
		6,232,336	B1	Hrabie et al.	05-15-2001	
		6,224,579	B1	Modak et al.	05-01-2001	
		6,162,487	A	Darouiche	12-19-2000	
		6,121,027	A	Clapper et al.	09-19-2000	
		6,087,462	A	Bowers et al.	07-11-2000	
		6,056,967	A	Steuerle et al.	05-02-2000	
		5,962,520	A	Smith et al.	10-05-1999	
		5,762,638	A	Shikani et al.	06-09-1998	
		5,709,672	A	Illner	01-20-1998	
		5,650,447	A	Keefer et al.	07-22-1997	
		5,641,855	A	Scherr et al.	06-24-1997	
		5,405,919	A	Keefer et al.	04-11-1995	
		5,344,411	A	Domb Abraham J et al.	09-06-1994	
		5,328,698	A	Onwumere, et al.	07-12-1994	
		5,316,912	A	Heimgartner et al.	05-31-1994	
		5,069,907	A	Mixon et al.	12-03-1991	
		4,999,210	A	Solomon et al.	03-12-1991	
		4,987,181	A	Bichon et al.	01-22-1991	
		4,865,870	A	Hu et al.	09-12-1989	
		4,786,556	A	Hu et al.	11-22-1988	
		4,720,512	A	Hu et al.	01-19-1988	
		4,678,660	A	McGary et al.	07-07-1987	
		4,675,347	A	Mochizuki et al.	06-23-1987	
		4,642,104	A	Sakamoto et al.	02-10-1987	
		4,605,564	A	Kulla, et al.	08-12-1986	
		4,442,133	A	Greco et al.	04-10-1984	
		4,419,444	A	Quash	12-06-1983	
		4,357,476	A	Reinchr et al.	10-02-1982	
		4,323,557	A	Rosso et al.	04-06-1982	
		4,310,509	A	Berglund et al.	01-12-1982	
		4,302,368	A	Dudley et al.	11-24-1981	
		4,217,338	A	Quash	08-12-1980	
		4,128,633	A	Lorenz, et al.	12-05-1978	
		3,695,921	A	Shepherd Thomas et al.	10-03-1972	

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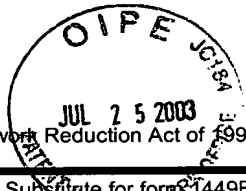
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Substitute for form 1449B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT Date Submitted: July 25, 2003 (use as many sheets as necessary)		Complete if Known	
		Application Number	09/850,324
Sheet	2	Filing Date	05/07/2001
	of	First Name of Inventor	William F. McDonald
	4	Group Art Unit	1714
		Examiner Name	Ana Lucrecia Woodward
		Attorney Docket Number	044829-0127

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FOREIGN PATENT DOCUMENTS								
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		Office ³	Number ⁴	Kind Code ⁵ (if known)				
			WO 95/05400		3M	02-23-1995		
			WO 86/02561			05-09-1986		
			WO 94/13870		Warner Lambert	06-23-1994		
			EP 0 969 056		Aventis Res & Tech GMBH	01-05-2000		
			EP 0 882 461		Unitika LTD	12-09-1998		
			GB 2 225 580		Smith & Nephew	06-06-1990		
			GB 2 153 235		Meadox Medicals Inc.	08-21-1985		
			GB 2 084 466			04-15-1982		

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.) date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ⁶
		Satoh et al., "Immobilization of Saccharides and Peptides on 96-Well Microtiter Plates with Methyl Vinyl ether-Maleic Anhydride Copolymer", Anal. Biochem., 260, 96-102, 1998.	
		Vercruysse et al., "Synthesis and in Vitro Degradation of New Polyvalent Hydrazide Cross-Linked Hydrogels of Hyaluronic Acid", Bioconj. Chem., 8, 686-694, 1997.	
		O'Shannessy et al., Immobilization of Glycoconjugates by Their Oligosaccharides: Use of Hydrazido-Derivatized Matrices, Anal. Biochem., 191, 1-8, 1990.	
		Ito et al., Preparation of High Capacity Affinity Adsorbents Using New Hydrazino-Carriers and Their Use for Low and High Performance Affinity Chromatography of Lectins, J. Biochem. (Tokyo), 99, 1267-1272.	
		Junowicz et al., The Derivatization of Oxidized Polysaccharides for Protein Immobilization and Affinity Chromatography Biochim. Biophys. Acta 428, 157-165, 1976.	

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**INFORMATION DISCLOSURE
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Date Submitted: July 25, 2003

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Sheet

3

of

4

Complete if Known

Application Number	09/850,324
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First Named Inventor	William F. McDonald
Group Art Unit	1714
Examiner Name	Ana Lucrecia Woodward
Attorney Docket Number	044829-0127

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		Miron et al., Polyacrylhydrazide-Agarose: Preparation via Periodate Oxidation and use for Enzyme Immobilization and Affinity Chromatography, J. Chromatogr., 215, 55-63, 1981.	
		Heimgartner, et al., Polyacrylic Polyhydrazides as Reagents for Detection of Glycoproteins, Anal. Biochem., 181, 182-189, 1989.	
		Fleminger et al., Oriented Immobilization of Periodate-Oxidized Monoclonal Antibodies on Amino and Hydrazide Derivatives of Eupergit C, Applied Biochem., 23, 123-137, 1990.	
		Del Rosso et al., Binding of the Basement-Membrane Glycoprotein Lamnin to Glycosaminoglycans, Biochem. J., 199, 699-704, 1981.	
		Henderson et al., Immobilised Phosphines Incorporation the Chiral Biopolymers Chitosan and Chitin, J. Chem. Soc., Chem. Commun., 9, 1863-1864, 1994.	
		Petach et al., A New Coupling Reagent for the Covalent Immobilisation of Enzymes, J. Chem. Soc., Chem. Commun., 17, 2181-2182, 1994.	
		Cochrane et al., Application of Tris(hydroxymethyl) Phosphine as a Coupling Agent for Alcohol Dehydrogenase Immobilization, Enzyme Microbial Technol., 18, 373-378, 1996.	
		Inman et al., Synthesis of Large Haptenic Compounds Having a Covalent Functional Group That Permits Covalent Linkage to Proteins, Cell Surfaces, Immunochemistry, 10, 153-163, 1973.	
		Ellis et al., Water-Soluble Tris(hydroxymethyl) Phosphine Complexes with Nickel, Palladium, and Platinum, Inorg. Chem., 31, 3026-3033, 1992.	

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Considered

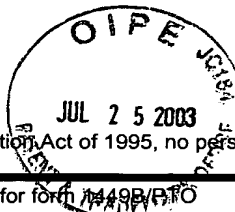
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		Lin et al., Preparation of Surface-modified Albumin Nanospheres, Biomaterials, V. 18, N. 7, 559-565, 1997.	
		Marconi et al., New Polyurethane Compsitions able to bond high Amounts of both Albumin and Heparin, V. 16, N. 6, 449-456, 1995.	
		Oswald et al., "Properties of a Thermostable B-Glycosides Immobilized Using Tris(hydroxymethyl) Phosphine as a Highly Effective Coupling Agent", Enzyme Microbial Technol., 23, 14-19, 1998.	
		Isosaki et al., "Immobilization of Protein Ligands with Methyl Vinyl Ether-maleic Anhydride Copolymer, J. Chromatogr., 597, 123-128, 1992.	

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